

Application No. 10/034,122
Attorney Docket No.: 011452
Amendment Under 37 C.F.R. § 1.116

REMARKS

Claims 4, 6, 7 and 9 are pending in the present application. Claims 4 and 7 are herein amended. No new matter has been entered.

Claim Rejections - 35 U.S.C. § 103

Claims 4 and 7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over **Maeda** (U.S. Patent 5,317,519) in view of **Frisken-Gibson**, *Using Linked Volumes to Model Object Collision, Deformation, Cutting, Carving, and Joining*, IEEE Transactions on Visualization and Computer Graphics, vol. 5, no. 4, (1999); and claims 6 and 9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over **Maeda** in view of **Frisken-Gibson**, further in view of **Schroeder**, *Decimation of Triangle Meshes*, Computer Graphics, vol. 26 (1992), and further in view of **Hoffman**, *Geometric and Solid Modeling*, Morgan Kaufman Publishers, (1989).

Favorable reconsideration is requested.

The Office Action states that claim language reciting that the extracted surface lattice points are not expressed in the form of blocks may overcome the prior art of record. (Office Action, page 3.)

Claims 4 and 7 have been amended to recite that “extracted surface lattice points are not expressed in the form of blocks.”

Applicant respectfully submits that neither Maeda nor Frisken-Gibson disclose a surface lattice point extracting section which extracts surface lattice points defining surfaces of the workpiece to be obtained after the machining on the basis of the connection information for the remaining

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lattice points after the connection information for the remaining lattice points is updated by the tool path processing section, ... wherein said extracted surface lattice points are not expressed in the form of blocks

as recited in amended claims 4 and 7.

Maeda discloses that three-dimensional data is expressed as a Z-directional height, an X-address and a Y-address. (Col. 4, lines 18-29.) The material shape is expressed in the form of blocks. (Figs. 4, 20A-C). Maeda does not disclose extracting surface lattice points defining surfaces of the workpiece to be obtained.

The Office Action cites Figs. 4 and 20A-C for disclosing this feature. However, as can be seen from these figures, the shape is expressed in the form of blocks having an X-/Y-address and a Z-value. In Fig. 20A, the expression of the shape is maintained in the form of blocks. Maeda does not disclose extracting data which defines surfaces of the workpiece and does not disclose extracting surface lattice points that are not expressed in the form of blocks.

Therefore, Maeda in view of Frisken-Gibson does not disclose the elements as recited in claims 4 and 7.

For at least the foregoing reasons, claims 4 and 7 are patentable over the cited references, and claims 6 and 9 are patentable by virtue of their dependence from claims 4 and 7 respectively. Accordingly, withdrawal of the rejection of claims 4, 6, 7 and 9 is hereby solicited.

In view of the aforementioned amendments and accompanying remarks, Applicant submits that the claims, as herein amended, are in condition for allowance. Applicant requests such action at an early date.

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If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicant's undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicant respectfully petitions for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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